

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

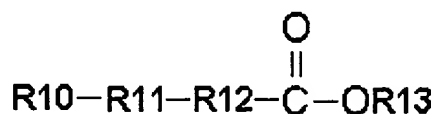
Listing of Claims:

1 - 11. (Canceled)

12. (Previously Presented) A method of inducing production of isoflavones in a plant comprising applying to the surface of at least part of a plant, which plant is capable of producing an isoflavone, a biologically effective amount of a composition comprising:

a) a nuclear receptor ligand, wherein said nuclear receptor ligand is a peroxisome proliferator having structure V below,

V



wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings,

R11 is an O or S,

R12 is a branched aliphatic chain comprising from 3 to 8 carbon atoms,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms; and

b) one or more compounds that i) enhance the release of isoflavones from sugar conjugates, ii) enhance the incorporation of aglycones into glyceollin, or iii) enhance the release of isoflavones from sugar conjugates and incorporation of aglycones into glyceollin.

13. (Previously Presented) The method of claim 12, wherein the enhancing compound is orthovanadate, rose bengal, or a tetrazolium redox dye.

14. (Previously Presented) The method of claim 12, wherein the enhancing compound is a copper salt or a fragment of the naturally occurring cell wall glucan from *Phytophthora sojae*.

15. (Previously Presented) The method of claim 12, wherein the composition further comprises one or more compounds chosen from phytologically acceptable diluents and adjuvants.

16. (Previously Presented) The method of claim 12, wherein the composition further comprises one or more active chemicals chosen from herbicides, insecticides, fungicides, and bacteriocides.

17. (Previously Presented) The method of claim 12, wherein the composition is applied to the plant stem, the plant root, the plant leaf, or combinations thereof.

18. (Previously Presented) The method of claim 12, wherein the composition is applied to a seed or a seedling.

19. (Previously Presented) The method of claim 12, wherein the composition is applied to a legume chosen from alfalfa, lima bean, pinto bean, chickpea, peanuts, and soybean.

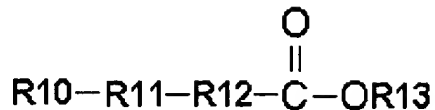
20. (Previously Presented) The method of claim 19, wherein the legume is soybean.

21-22 (Canceled)

23. (Currently Amended) A composition for inducing disease resistance in a plant or seed, comprising:

(a) one or more nuclear receptor ligands having structure V below:

V



wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings,

R11 is an O or S,

R12 is a branched aliphatic chain comprising from 1 to 8 carbon atoms,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms; and

(b) one or more enhancing compounds that i) enhance the release of isoflavones from sugar conjugates in the plant or seed, ii) enhance incorporation of aglycones in the plant or seed into glyceollin, or iii) enhance release of isoflavones from sugar conjugates in the plant or seed and incorporation of aglycones in the plant or seed into glyceollin,

wherein the enhancing compound is chosen from ion effectors, ~~ortho~~vanadate, rose bengal and tetrazolium redox dyes.

24- 43 (Canceled)